

#### Dokumentácia projektu

# Interpret jazyka IFJ14

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Autor: TODO, xloginXX@stud.fit.vutbr.cz

Fakulta Informačních Technologií Vysoké Učení Technické v Brně

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### 1 Úvod

Vymyslieł text

#### 2 Riešenie projektu

- 2.1 Interpret
- 2.2 Algoritmy

Sem dopíše Tomáš postupy postupy riešenia algoritmov etc.

#### 2.3 Práca v tíme

### A Metriky kódu

Počet riadkov zdrojového textu: 12689 riadkov

Veľkosť statických dát: 6147B

Veľkosť spustiteľného programu: 13294B

Aktualizovať metriky po dopísani projektu

#### **B** LL Gramatika

PROGRAM  $\rightarrow$  VAR\_DECLR FUNC COMPOUND\_STMT .

 $VAR\_DECLR \rightarrow var\ VAR\_DEF$ 

VAR\_DECLR  $\rightarrow \epsilon$ 

 $\begin{array}{ll} VAR\_DEF & \rightarrow id: type \; ; \; VAR\_DEFN \\ VAR\_DEFN & \rightarrow id: type \; ; \; VAR\_DEFN \end{array}$ 

VAR\_DEFN  $\rightarrow \epsilon$ 

FUNC  $\rightarrow$  function id PARAM\_DEF\_LIST : type ; FORWARD FUNC

FUNC  $\rightarrow \epsilon$ 

FORWARD  $\rightarrow$  forward;

FORWARD  $\rightarrow$  VAR\_DECLR COMPOUND\_SEMICOLON\_STMT

 $PARAM\_DEF\_LIST \rightarrow (PARAMS\_DEF)$ 

PARAMS\_DEF  $\rightarrow$  id : type PARAMS\_DEF\_N

PARAMS\_DEF  $\rightarrow \epsilon$ 

PARAMS\_DEF\_N  $\rightarrow$ ; id : type PARAMS\_DEF\_N

PARAMS\_DEF\_N  $\rightarrow \epsilon$ 

 $\begin{array}{ll} \text{TERM\_LIST} & \rightarrow \text{(TERMS)} \\ \text{TERMS} & \rightarrow \text{term TERMS\_N} \\ \text{TERMS\_N} & \rightarrow \text{, term TERMS\_N} \\ \end{array}$ 

TERMS\_N  $\rightarrow \epsilon$ 

 $\begin{array}{ll} COMPOUND\_STMT & \rightarrow begin \ STMT\_E \ end \\ COMPOUND\_SEMICOLON\_STMT & \rightarrow COMPOUND\_STMT \ ; \end{array}$ 

STMT\_LIST  $\rightarrow \epsilon$ 

 $\begin{array}{ccc} \text{STMT\_LIST} & & \rightarrow \text{; STMT\_STMT\_LIST} \\ \text{STMT\_E} & & \rightarrow \text{STMT\_STMT\_LIST} \end{array}$ 

 ${\tt STMT\_E} \qquad \qquad \rightarrow \epsilon$ 

STMT  $\rightarrow$  id := EXPR

 $\begin{array}{lll} \text{STMT} & \rightarrow \text{if EXPR then COMPOUND\_STMT IF\_N} \\ \text{STMT} & \rightarrow \text{while EXPR do COMPOUND\_STMT} \\ \text{STMT} & \rightarrow \text{repeat STMT STMT\_LIST until EXPR} \end{array}$ 

STMT  $\rightarrow$  COMPOUND\_STMT

STMT  $\rightarrow$  readln ( id )

STMT  $\rightarrow$  write TERM\_LIST

IF\_N  $\rightarrow$  else COMPOUND\_STMT

IF\_N  $\rightarrow \epsilon$ 

#### C Precedenčná tabuľka

<sup>&</sup>lt;sup>1</sup>Unárne mínus

	U- 1	not	*	/	and	+	-	or	xor	<	>	<=	>=	=	<>	(	)	f	,	\$	var
U- 1	Н	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
not	R	Η	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
*	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
/	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
and	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
+	S	S	S	S	S	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
-	S	S	S	S	S	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
or	S	S	S	S	S	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
xor	S	S	S	S	S	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S
<	S	S	S	S	S	S	S	S	S	R	R	R	R	R	R	S	R	S	R	R	S
>	S	S	S	S	S	S	S	S	S	R	R	R	R	R	R	S	R	S	R	R	S
<=	S	S	S	S	S	S	S	S	S	R	R	R	R	R	R	S	R	S	R	R	S
>=	S	S	S	S	S	S	S	S	S	R	R	R	R	R	R	S	R	S	R	R	S
=	S	S	S	S	S	S	S	S	S	R	R	R	R	R	R	S	R	S	R	R	S
<>	S	S	S	S	S	S	S	S	S	R	R	R	R	R	R	S	R	S	R	R	S
(	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	Η	S	Η	E	S
)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	E	R	E	R	R	E
f	Е	E	E	E	E	E	E	E	E	E	E	E	E	E	E	Η	E	E	E	E	E
,	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	Η	S	Η	E	S
\$	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	E	S	E	E	S
var	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	E	R	E	R	R	E